02/17/00

٥		
		7

	70714	4.0
Rel.807/99 Pub.605)	FORM 4-1	4-:

Practitioner's Docket No. ___00138

PATENT

Preliminary Classification:

Proposed Class:

Subclass:

NOTE: "All applicants are requested to include a preliminary classification on newly filed patent

applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand comer of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129.' " M.P.E.P. § 601, 7th ed.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Box Patent Application Assistant Commissioner for Patents Washington, D.C. 20231

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s):

Simon Robert Smith and Richard Paul Whittington

WARNING: 37 C.F.R. § 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name or names of the inventor or inventors."

For (title):

METHOD FOR CONSTRUCTING A PROCESS-DRIVEN INFORMATION

SYSTEM

CERTIFICATION UNDER 37 C.F.R. § 1.10*

(Express Mail label number is mandatory.)
(Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date 2-17-00, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number <u>EL197551077US</u>, addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

TONYA WilliAMS
(type or print name of person mailing paper)

e 2601°

Signature of person mailing pape

WARNING: Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

*WARNING: Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will **not** be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

(New Application Transmittal [4-1]—page 1 of 11)

1. Type of Application

This new application is for a(n)

(check one applicable item below)

☑X Original (nonprovisional)
☐ Design
☐ Plant
WARNING: Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. § 371(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application.
WARNING: Do not use this transmittal for the filing of a provisional application.
NOTE: If one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION.
☐ Divisional.
☐ Continuation.
☐ Continuation-in-part (C-I-P).
. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)

2

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. § 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designating the United States of America; or
 - (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(f) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICA-TION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120, 121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 119, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

(New Application Transmittal [4-1]-page 2 of 11)

FORM 4-1

WARNING:	When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal
	holiday within the District of Columbia, any nonprovisional application claiming benefit of the
	provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the
	District of Columbia. See 37 C.F.R. § 1.78(a)(3).

The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

3. Papers Enclosed

A. Required for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 (Design) Application 9 Pages of specification 2 Pages of claims 10 Sheets of drawing WARNING: DO NOT submit original drawings. A high quality copy of the drawings should be supplied when

filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G.

NOTE: "Identifying indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm. (5/8 inch) down from the top of the page . . . " 37 C.F.R. § 1.84(c)).

	(complete the following, if applicable)		
	The enclosed drawing(s) are photograph(s), and there is also attached a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." C7 C.F.R. § 1.84(b).		
	formal		
塞	informal		
B. Oth	er Papers Enclosed		
<u>2</u> P	ages of declaration and power of attorney		
1_P	ages of abstract		
0	ther		
. Additi	onal papers enclosed		
	Amendment to claims		
	☐ Cancel in this applications claims before calculating the filing fee. (At least one original independent claim must be retained for filing purposes.)		
	Add the claims shown on the attached amendment. (Claims added have been numbered consecutively following the highest numbered original claims.)		
塚	Preliminary Amendment		
	Information Disclosure Statement (37 C.F.R. § 1.98)		
	Form PTO-1449 (PTO/SB/08A and 08B)		
	Citations		

13
۱Ĵ
LT
IN
-
\Q
۱,D
bj.
Ŋ
ļuzī
1100

<u> </u>	ן ר	Declaration of Biological Deposit				
		Submission of "Sequence Listing," computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence.				
		Authorization of Attorney(s) to Accept and Follow Instructions from Representative				
		Special Comments				
		Other				
5. Dec	lara	tion or oath (including power of attorney)				
	the applications the by a being decipers	ewly executed declaration is not required in a continuation or divisional application provided that prior nonprovisional application contained a declaration as required, the application being filed is all or fewer than all the inventors named in the prior application, there is no new matter in the lication being filed, and a copy of the executed declaration filed in the prior application (showing signature or an indication thereon that it was signed) is submitted. The copy must be accompanied a statement requesting deletion of the names of person(s) who are not inventors of the application of filed. If the declaration in the prior application was filed under § 1.47, then a copy of that laration must be filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning son under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently cuted declaration must be filed. See 37 C.F.R. §§ 1.63(d)(1)–(3).				
NOTE:	is di abb cou	eclaration filed to complete an application must be executed, identify the specification to which it rected, identify each inventor by full name including family name and at least one given name, without reviation together with any other given name or initial, and the residence, post office address and ntry or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 R. § 1.63(a)(1)–(4).				
NOTE:	as p as p is th this	e inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration or described by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration or described by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship set inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under paragraph accompanied by the fee set forth in § 1.17(j) is filed supplying or changing the name sames of the inventor or inventors." 37 C.F.R. § 1.41(a)(1).				
X	XX E	Enclosed				
	E	Executed by				
		(check all applicable boxes)				
	X[☑ inventor(s).				
		legal representative of inventor(s). 37 C.F.R. §§ 1.42 or 1.43.				
		joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.				
		☐ This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F.R. § 1.47 is also attached. See item 13 below for fee.				
] N	Not Enclosed.				
NOTE:	the may	ere the filing is a completion in the U.S. of an International Application or where the completion of U.S. application contains subject matter in addition to the International Application, the application of the treated as a continuation or continuation-in-part, as the case may be, utilizing ADDED PAGE R NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION CLAIMED.				
		Application is made by a person authorized under 37 C.F.R. § 1.41(c) on behalf of all the above named inventor(s).				
		(New Application Transmittal [4-1]—page 4 of 11)				

(Rel.80—7/99 Pub.605) FORM 4-1 4-6

(The de	eclaration or oa	ath, along with the surcharge required by 37 C.F.R. § 1.16(e) can be filed subsequently).
		Showing that the filing is authorized. Inot required unless called into question. 37 C.F.R. § 1.41(d))
	orship Staten	
WARNING:	 If the named in ownership of t submitted. 	ventors are each not the inventors of all the claims an explanation, including the he various claims at the time the last claimed invention was made, should be
The inve	entorship for a	I the claims in this application are:
XX	The same.	
		or
		. An explanation, including the ownership of the various claims at ast claimed invention was made,
	☐ is submit	ted.
	☐ will be su	ubmitted.
7. Langu	age	
Ai re	n English translat quired by 37 C.F.I	Iding a signed oath or declaration may be filed in a language other than English. ion of the non-English language application and the processing fee of \$130.00 R. § 1.17(k) is required to be filed with the application, or within such time as may a 37 C.F.R. § 1.52(d).
浆	English	
	Non-English	
		ched translation includes a statement that the translation is accu-C.F.R. § 1.52(d).
8. Assign	nment	
**	An assignment	nt of the invention toTHE SALAMANDER ORGANIZATION
	MENT) A	ed. A separate 凶 "COVER SHEET FOR ASSIGNMENT (DOCU-COMPANYING NEW PATENT APPLICATION" or ☐ FORM PTO also attached.
	☐ will follow	N.
NOTE: "f	f an assignment is nd one for the as:	submitted with a new application, send two separate letters-one for the application signment." Notice of May 4, 1990 (1114 O.G. 77-78).
WARNING	: A newly execu in-part applica	ted "CERTIFICATE UNDER 37 C.F.R. § 3.73(b)" must be filed when a continuation- tion is filed by an assignee. Notice of April 30, 1993, 1150 O.G. 62-64.
		(New Application Transmittal [4-1]—page 5 of 11)

. . . .

O	9903830.	0		19 February 1
Country	Appln. No.			Filed
Country	Appln. No.			Filed
Country	Appin. No.			Filed
from which priority is claimed	i			
☐ is (are) attached.				
$ \mathbf{x} \times \mathbf{vill} $ follow.				
NOTE: The foreign application for declaration. 37 C.F.R. §		n for prio	rity must	be referred to in the oath or
§ 120 is itself entitled to p PAGES FOR NEW APPLI CLAIMED.	tional Application from whici priority from a prior foreign ap CATION TRANSMITTAL WH	h this app oplication,	lication cl then con	directly relates. If any parent laims benefit under 35 U.S.C. nplete item 18 on the ADDED PRIOR U.S. APPLICATION(S)
10. Fee Calculation (37 C.	F.R. § 1.16)			
A. xx Regular applicatio	n			
	CLAIMS AS FIL	ED		
Number filed	Number Extra	F	Rate	Basic Fee 37 C.F.R. § 1.16(a) \$780:00: 6
Fotal Claims (37 C.F.R.	20 =	× \$	18.00	
§ 1.16(c)) 7 — — Independent		^ *	10.00	
Claims (37 C.F.R.	3 =	× \$	78.00	
	5 –			
(1.16(b)) 1 –	3 -	· · · · · · · · · · · · · · · · · · ·		
§ 1.16(b)) 1 –	3 –	+ \$2	260.00	
\$ 1.16(b)) 1 — Multiple dependent claim(s), if any (37 C.F.R. § 1.16(d))	elling extra claims is e			
1.16(b)) 1 − Multiple dependent claim(s), if any (37 C.F.R. § 1.16(d)) ☐ Amendment cance		nclosed	•	d.
§ 1.16(b)) 1 — Multiple dependent claim(s), if any (37 C.F.R. § 1.16(d)) Amendment cance Amendment deleti	elling extra claims is e	nclosed cies is e	enclosed	d.
Multiple dependent claim(s), if any (37 C.F.R. § 1.16(d)) Amendment cance Amendment deleti Fee for extra claims	elling extra claims is en ng multiple-dependent ns is not being paid at are not paid on filing they must the time period set for respo	nclosed cies is e t this tir	enclosed	
Multiple dependent claim(s), if any (37 C.F.R. § 1.16(d)) Amendment cance Amendment deleti Fee for extra claims option to the expiration of	elling extra claims is en ng multiple-dependent ns is not being paid at are not paid on filing they must the time period set for respo	nclosed cies is e t this tir st be paid onse by th	enclosed	ims cancelled by amendment,
Multiple dependent claim(s), if any (37 C.F.R. § 1.16(d)) Amendment cance Amendment deleti Fee for extra claims opior to the expiration of	elling extra claims is engling multiple-dependence is not being paid at are not paid on filing they must the time period set for responsive to C.F.R. § 1.18(d). Filling Fee Calculation	nclosed cies is e t this tir st be paid onse by th	enclosed	ims cancelled by amendment, and Trademark Office in any

(Rel.80—7/99 Pub.605) FORM 4-1 4-8

c. \square	Plant application (\$480.00—37 C.F.I	R. & 1.16(a))		
	(4.400.00	Filing fee calculation	1	\$
ld Oma	ll Fuith. Statement	-	'	Ψ
l1. Sma X⊠	Il Entity Statement Statement(s) that t is (are) attached.	•	all entity under 37 (C.F.R. § 1.9 and 1.27
WARNING	the status is available affect any other app indirectly dependent refiling of an application a continued prosecut a new determination application. A nonprosecution of a prior application or in the reference to the statement in the prior desired. The payment for purposes of this attention of the statement of the payment of the payment of the statement of the payment of the p	and desired. Status as a lication or patent, includupon the application or patent, including an under § 1.53 as a continued entitlement in the prior application, or a reissue application, or a reissue application in the prior application or in the patent of the small entity basic section." 37 C.F.R. § 1.25 aust not be established when	small entity in one apping applications or patient in which the status inuation, division, or corps; to small entity status for the small entity status for the small entity status for the status or the reist and application or the patent and status as a small entity filing fee will be 3(a)(2).	lication or patent in which lication or patent does not ents which are directly or has been established. The trinuation-in-part (including reissue application requires or the continuing or reissue S.C. § 119(e), 120, 121, or tratement filed in the prior ssue application includes a or includes a copy of the all entity is still proper and treated as such a reference assigning the statement
	1996 (emphasis adde			09.03, 6th ed., rev. 2, July
	•			
		entity was claimed i		form which benefit
		or this application u		_, from which benefit
		119(e), 120, 121, 365(c),		
	and which status	as a small entity is	still proper and de	esired.
	☐ A copy of th	e statement in the p	orior application is	included.
	Filing Fee Cal	culation (50% of A, I	B or C above)	
		\$ 345		
а	ny excess of the full fee pre- re filed within 2 months ontendable under § 1.136	of the date of timely pa	all entitiy status is estably yment of a full fee. The	ished and a refund request a two-month period is not
12. Req	uest for Internation	nal-Type Search (37	C.F.R. § 1.104(d))
		(complete, if app	olicable)	
	• •	international-type se mination on the me	·	application at the time

13. Fee Pay	ment Being Made at This Time	
☐ Not	t Enclosed	
	No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. subsequently.)	§ 1.16(e) can be paid
⊵ k End	closed	
*5	Filing fee	\$ <u>345</u>
***	Recording assignment (\$40.00; 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION".)	\$ 40
	Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached (\$130.00; 37 C.F.R. §§ 1.47 and 1.17(i))	\$
	For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k))	\$
	Processing and retention fee (\$130.00; 37 C.F.R. §§ 1.53(d) and 1.21(l))	\$
	Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e))	\$
failing 37 C. either	F.R. § 1.21(I) establishes a fee for processing and retaining any app to complete the application pursuant to 37 C.F.R. § 1.53(f) and t F.R. §§ 1.53 and 1.78(a)(1), indicate that in order to obtain the ben the basic filing fee must be paid, or the processing and retention 1 year from notification under § 53(f).	nis, as well as the Glanges to efit of a prior U.S. application
	Total fees enclosed	\$ 385
14. Method	of Payment of Fees	
¥Z¥ CI	neck in the amount of \$ 385	-
	harge Account No	_ in the amount o
Ä	duplicate of this transmittal is attached.	
NOTE: Fees § 1.2	should be itemized in such a manner that it is clear for which purpo 2(b).	ose the fees are paid. 37 C.F.F

(New Application Transmittal [4-1]—page 8 of 11)

15. Authorization to Charge Additional Fees

WARNING: If no fees are to be paid on filing, the following items should not be completed.

WARNING: Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.

The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. 08-1500 :

XX 37 C.F.R. § 1.16(a), (f) or (g) (filing fees)

⊠x 37 C.F.R. § 1.16(b), (c) and (d) (presentation of extra claims)

NOTE: Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid or these claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 C.F.R. § 1.16(d)), it might be best not to authorize the PTO to charge additional claim fees, except possibly when dealing with amendments after final action.

37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)

 \times 37 C.F.R. § 1.17(a)(1)–(5) (extension fees pursuant to § 1.136(a)).

37 C.F.R. § 1.17 (application processing fees)

NOTE: ". . . A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).

- 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))
- NOTE: Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 C.F.R. § 1.311(b).
- NOTE: 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying, . . . the issue fee. . . " From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

(New Application Transmittal [4-1]—page 9 of 11)

16. Instructions as to Overpayment NOTE: ". . . Amounts of twenty-five dollars or less will not be returned unless specifically requested within

". . . Amounts of twenty-five dollars or less will not be returned unless specifically requested within a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).

X⊠ Credit Account No. ___08-1500

☐ Refund

Reg. No. 32,840

Tel. No. (918) 587 2000

Customer No.

SIGNATURE OF PRACTITIONER

Mark G. Kachigian (type or print name of attorney)

228 West 17th Place

P.O. Address

Tulsa, Oklahoma 74119

(New Application Transmittal [4-1]-page 10 of 11)

4-12

(c. pı st th	poration by reference of added pages heck the following item if the application in this transmittal claims the benefit of rior U.S. application(s) (including an international application entering the U.S. age as a continuation, divisional or C-I-P application) and complete and attach e ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF RIOR U.S. APPLICATION(S) CLAIMED)	
ΚĮΚ	Plus Added Pages for New Application Transmittal Where Benefit of Prior XXS.X Application(s) Claimed Number of pages added	U.K.
П	Plus Added Pages for Papers Referred to in Item 4 Above	
ب	Number of pages added	
	Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.	
	Number of pages added	
	Plus "Assignment Cover Letter Accompanying New Application"	
	Number of pages added	
State	ment Where No Further Pages Added	
	no further pages form a part of this Transmittal, then end this Transmittal with is page and check the following item)	
	This transmittal ends with this page.	

application.

10.	ne	iate back—35	U.S.C. 11	9 Priority	Ciaim to	r	ior Applica	tion
		or U.S. application						
U.S.,		ntified above in ite						
			99038			19	February	1999
		Country		Appln. no.			Filed on	
The	e ce	rtified copy(ies) ha	as (have)					
		been filed on filed on		in prior appl	ication 0	/		, which was
	_ *	isx(are)xattached	x will	follow				
		the International Be application in the application comm a U.S. serial number stage is not enter prosecution of a co documents from the to request transfer, enter and make a re the priority documents stage may not be	continuing a unicated by the er unless the need. Therefore, ontinuing app e folders and to retrieve the follecord of such teents in folders	application. The International stage is a such certified dication. An alte transfer them to olders, make suit copies in the Cos of internations.	is is so beca Bureau is pi entered. Such copies may r mative would the continuir able record r continuing Ap al applicatior	luse in laced folding the laced for the lace	the certified copy of in a folder and a lers are disposed of e available if need to physically rem plication. The reso lons, transfer the of tion are substantiat have not enter	of the priority is not assigned of if the national ded later in the ove the priority purces required certified copies, al. Accordingly,
19.	Ma	intenance of C	opendend	y of Prior	Applicat	tion	1	
NOT	r	The PTO finds it usefu response is filed with November 5, 1985 (106	the papers c					
A.		Extension of tim	e in prior a	application				
	(Thi	is item must be c if the p		and the pape on the prior a				ation,
		A petition, fee a	nd respons	e extends th	e term in	the	pending prio i	application
		☐ A copy of t	he petition	filed in prior	application	on is	s attached.	
B.		Conditional Petit		•	• •			
		(complet	e this item	, if previous	item not a	appl	icable)	
		A conditional pe	tition for e	xtension of	time is be	ing 1	filed in the pe	ending prior

☐ A **copy** of the conditional petition filed in the prior application is attached.

Applicant:

RICHARD PAUL WHITTINGTON

Attorney's Docket BAI525-125/00138

Serial or Patent No: Filed or Issued:

For:

METHOD FOR CONSTRUCTING A PROCESS-DRIVEN INFORMATION SYSTEM

VERIFIED STATEMENT (DECLARATION)
CLAIMING SMALL ENTITY STATUS
[37 CFR SECTION 1.9 (f) and SECTION 1.27 (b)]
INDEPENDENT INVENTOR

As the below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9 (c) for purposes of paying reduced fees under Section 41 (a) and (b) of Title 35, United States Code, to the Patent and Tradernark Office with regard to the invention entitled:

METHOD FOR CONSTRUCTING A PROCESS-DRIVEN INFORMATION SYSTEM

described in:

[X]	the specification filed he	rewith.	
<u>ו</u> ז	•		
ii	Patent No.	issued	•
to assign, graciassified as a or to any con	ant, convey or license any an independent inventor ur	rights in the nder 37 CFR 1. lify as a small i	am under no obligation under contract or law invention to any person who could not be 9 (c) if that person had made the invention, business concern under 37 CFR 1.9 (d) or a
	igation under contract or		assigned, granted, conveyed, or licensed are grant, convey or license any rights in the
	[] no such person, conc	ern, or organiz	ation
	[x] persons, concerns or		
			quired from each named person, concern or their status as small entities. [37 CFR 1,27].
FULL NAM	E:The Salamander Organis	sation Ltd []	Individual
			[X] Small Business Concern
	York Science Pa	rk.	[] Non Profit Organization
	York, YO10 5D0		

I acknowledge the duty to file, in this application or patent, notification of any change in status

United Kingdom

وكالخا

resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. [37 CFR 1.28(b)].

I hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF INVENTOR

RICHARD PAUL WHITTINGTON

Signature of Inventor

16 Feb 2000

Date

Applicant:

SIMON ROBERT SMITH

Attorney's Docket BAI525-125/00138

Serial or Patent No:

Filed or Issued:

For:

METEOD FOR CONSTRUCTING A PROCESS-

DRIVEN INFORMATION SYSTEM

VERIFIED STATEMENT (DECLARATION)
CLAIMING SMALL ENTITY STATUS
[37 CFR SECTION 1.9 (f) and SECTION 1.27 (b)]
INDEPENDENT INVENTOR

As the below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9 (c) for purposes of paying reduced fees under Section 41 (a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled:

METHOD FOR CONSTRUCTING A PROCESS-DRIVEN INFORMATION SYSTEM

described in:

[X]	the specification f	iled herewith.	
	Application Seria	l No	
[]	Patent No.	issued	The state of the s
to assign, gr classified as or to any cor	ant, convey or licer an independent inve	ise any rights in the intor under 37 CFR ot qualify as a small	am under no obligation under contract or law invention to any person who could not be 1.9 (c) if that person had made the invention, business concern under 37 CFR 1.9 (d) or a
	ligation under contr		assigned, granted, conveyed, or licensed are grant, convey or license any rights in the
		n, concern, or organi erns or organization	
			equired from each named person, concern or their status as small entities. [37 CFR 1.27].
FULL NAM	E:The Salamander (Organisation Ltd []	Individual
ADDRESS:	The Innov	ation Centre nce Park, 10 5DG	[X] Small Business Concern [] Non Profit Organization

I acknowledge the duty to file, in this application or patent, notification of any change in status

resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. [37 CFR 1.28(b)].

I hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF INVENTOR

SIMON ROBERT SMITH

Sim Sun

Signature of Inventor

16/05/00

Date

Applicant(s) or Patentee(s): THE SALAMANDER ORGANISATION LTD

Serial or Patent No: Filed or Issued:

For:

METHOD FOR CONSTRUCTING A PROCESS-

DRIVEN INFORMATION SYSTEM

VERIFIED STATEMENT (DECLARATION) **CLAIMING SMALL ENTITY STATUS** [37 CFR SECTION 1.9 (f) and SECTION 1.27 (b)] **SMALL BUSINESS CONCERN**

We hereby declare that we are

_ the owner of the small business concern identified below:

X an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF CONCERN ADDRESS OF CONCERN The Innovation Centre

The Salamander Organisation Ltd

York Science Park, York, YO10 5DG United Kingdom

We hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.3-18, and reproduced in 37 CFR 1.9 (d) for purposes of paying reduced fees under Section 41 (a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third-party or parties controls or has the power to control both.

We hereby declare that rights under contract of law have been conveyed, to and remain with the small business concern identified above with regard to the invention, entitled

METHOD FOR CONSTRUCTING A PROCESS-DRIVEN INFORMATION SYSTEM

described in:

[X]	the specification filed herewith.	
[]	Application Serial No.	
[]	Patent No. issued	٠.

If the rights held by the above identified small business concern are not exclusive, each individual, concern or

organization having rights to the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who could not qualify as a small business concern under 37 CFR 1.9(d) or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

* Note: Separate verified statements are required from eac to the invention averring to their status as small entities. (3	h nam 7 CFR	ed person, concern or organization having rights 1.27).
NAME OF CONCERN ADDRESS OF CONCERN		
[] INDIVIDUAL [] SMALL BUSINESS CONCERN	[]	NON PROFIT ORGANIZATION
NAMEADDRESS		
[] INDIVIDUAL [] SMALL BUSINESS CONCERN		ON PROFIT RGANIZATION
We acknowledge the duty to file, in this application or pate of entitlement of small entity status prior to paying, or at maintenance fee due after the date on which status as a status 1.28(b)).	the tir	US Of Daying, the eathest of the 1920s for or drive
We hereby declare that all statements made herein of our o	wn kn	owledge are true and that all statements made or

information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING

RP WHITTING TOW

TITLE OF PERSON OTHER THAN OWNER

DATE 14 Feb 2000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	Unknown)
Filing Date:	Unknown)
Priority Date:	19 Feb 1999)
Applicants:	Simon Robert Smith and Richard Paul Whittington)
For:	METHOD FOR CONSTRUCTING A PROCESS-DRIVEN INFORMATION SYSTEM)

PRELIMINARY AMENDMENT

Assistant Commissioner For Patents
Box: New Application

Washington, D.C. 20231

Dear Sir:

This is a preliminary amendment to the enclosed application entitled "Method For Constructing A Process-Driven Information System". Please amend the specification as follows:

Before the first paragraph on page 1, please insert

-- CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority to GB Application No. 9903830.9 filed 19 February 1999.

BACKGROUND OF THE INVENTION--;

On page 3 before line 17 insert the following heading:

--SUMMARY OF THE INVENTION--;

Page 5 before line 13 insert the following heading:

--BRIEF DESCRIPTION OF THE DRAWINGS--;

Page 6 before line 17 insert the following heading:

--DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT--;

Page 9 after line 6 add the following:

--While the invention has been described with a certain degree of particularly, it

is manifest that many changes may be made in the details of construction and the

arrangement of components without departing from the spirit and scope of this

disclosure. It is understood that the invention is not limited to the embodiments set forth

herein for purposes of exemplification, but is to be limited only by the scope of the

attached claim or claims, including the full range of equivalency to which each element

REMARKS

The application should now be in condition for examination, which is respectfully

requested.

Respectfully Submitted

HEAD, JOHNSON & KACHIGIAN

Dated: February 17, 2000

Mark G. Káchigian, Reg. No.

228 West 17th Place

Tulsa, Oklahoma 74119

(918) 584-4187

Attorneys for Applicant

• 🧇

Method For Constructing a Process-Driven System

The present invention relates to a method for constructing a process-driven information system, and more particularly to a method for the development of business process models for distribution through web browsers, and the provision of access to diverse information sources and system functionality through said models.

The development and distribution of process models is increasingly valued as the focus for many business improvement endeavours, ensuring that business workers appreciate how their part of the business works and how their contribution relates to other parts of the business. The value of process models can come both from enhanced business performance, and from the reduction in risk of failures of adherence to best practise, whether that best practise is defined within the organisation or by a regulatory body.

Realising the potential value of process models requires the dissemination of models which fulfil the following requirements:

- 1) Can reflect various aspects of the business processes; and
- 2) Which actively support the business workers in carrying out their work.

As an example of the first requirement, a product delivery process is likely to require co-ordination between technical, financial, logistical and marketing responsibilities; and an individual financial analyst needs to be able to identify the tasks currently required of them, and to appreciate the context of their analysis, including the likely consequences of their judgements or recommendations.

As an example of the second requirement, said product delivery process is likely to require computer support which is integrated with the various coordinated responsibilities, and available to a financial analyst within the context of these responsibilities.

Inventions in the field of process modelling have attempted to address the first of these requirements e.g. by providing graphical representations of processes [US5819270], or mapping processes to workflow structures [US5630069], and this work is cited here as prior art. These inventions provide a visualisation of business processes in the context of business intent and direction. A number of prior approaches exist to disseminate business models widely across a business, typically comprising business modelling software combined with a facility to generate a set of web based pages representing these models, navigable by business workers. However these approaches do not provide for the enactment of processes i.e. the manipulation of resources by workers which are required to put the business steps which are the subject of the models into practice.

Inventions in the field of process enactment and workflow have attempted to address the second of these requirements, through:

- A. Methods and apparatus for developing workflow systems to support ordered activities carried out by a collection of users and examples of this are disclosed in the prior art patents US05799297, US05216592, US05301320, US0574661.
- B Systems to address the task needs of users independently of their co-workers and an example of this is disclosed in US0553861

These documents illustrate systems to provide support for the manipulation of business resources by workers, but typically lack

visualisation, contextual positioning and awareness for workers within the processes of a business.

There have been previous attempts to bring these two areas of business process modelling and understanding, and resource manipulation, together using workflow systems to address specialist functional requirements such as illustrated in US05745901 or using specific modelling languages of tasks and actions as illustrated in US05734837, so concentrating only on processes which are to have an enactment through computer support. The call centre is a typical embodiment of such a concept. Products which attempt a more general linking of these two areas have used proprietary technologies to do so.

It is therefore an aim of the present invention to provide a general, open method for a process model, which addresses both of the requirements illustrated above and to allow the potential value of the business modelling as outlined in the above to be realised.

According to the present invention there is provided a method for creating a process-driven information system, said method comprising the following steps:

- creating a process model of a system comprising one or more elements, said model created in a browser-compatible format
- using this model to identify the requirements for software support
- creating one or more software components in a browser-compatible format satisfying these requirements
- generating a process-driven information system comprising said one or more elements of said process model acting as the user interface to said software components

Typically the process model is part of a general purpose graphical business model.

In one embodiment the software components are accessed by the user selection of one or more of the process model elements. Typically the process model is illustrated on a display screen and the elements can be selected by any conventional user control system such as mouse, keyboard etc. and when an element is selected an appropriate display is generated for any associated software component.

Further preferably the process model is accessible via a web browser.

Typically the one or more elements of the process model are provided in a tool which uniquely identifies each element and maps each element to one or more software components, in one example, in the form of arbitrary alternative web pages and/or web-based resources.

In use, a modeller/user follows the method described above to create a set of general purpose graphical business models containing various linked elements in a tool, said tool able to generate models which are accessible by a web browser and which links the model elements in the browser by uniquely identifying each element and corresponding web page. A preferred embodiment of the invention allows the modeller to preview the web page of a model element, and map this model element to an arbitrary alternative web-based resource.

In addition, a preferred embodiment of the present invention implements the concept of user-driven information system development utilising open standards in process modelling and software component development based on web browser technologies.

The advantage of the present invention is that it provides a method for creating a process driven information system which can communicate and disseminate arbitrary business intent, additionally providing the task support characteristics of workflow software, typified by its ability to provide coordination and awareness support for business users carrying out their work within the organisation. The method allows non-technical users to rapidly create process models which describe the working of an organisation. The models can be used as the user interface for directing the operation of a collection of software components.

Embodiments of the invention will now be described with reference to the accompanying Figures wherein:

Figure 1 represents an embodiment of the architecture of the apparatus of the present invention;

Figure 2 shows a screen display of a 'Care Planning and Delivery Process';

Figure 3 shows a screen display of the 'Care Planning and Delivery Process' utilising a process model in accordance with the invention, allowing a preview of the web-based model generated from the business modelling software;

Figure 4 shows a screen display allowing the searching of a patient database;

Figure 5 shows a screen display of the drag-and-drop of the webbased form from Figure 4 onto the model element 'Find a Patient' in accordance with the invention;

Figure 6 shows a screen display of the electronic form from Figure 4 mapped to the model element 'Find a Patient' in accordance with the invention;

Figure 7 shows a screen display of the mapping between the electronic form from Figure 4 and the model element 'Find a Patient';

Figure 8 shows a screen display of the published model 'Care Planning and Delivery' in accordance with the invention;

Figure 9 shows a screen display of the published form, navigated to from the model element 'Find a Patient', and parameterised by the user;

Figure 10 shows a screen display of the results returned from the populated form.

The models for this example were generated using a process modelling tool, "MooD Business Developer", and Mood Web Publisher, TM MooD and the screen display of the web-based form was developed in "Microsoft Visual InterDev" TM Microsoft. It should however be appreciated that other alternative products could be used to perform the same functions.

In the following description, an example of the method according to the invention is referred to as "PSIM" (Process-Systems Integration Method). The underlying concept of PSIM is to harmonise the enactment of business processes with the delivery of associated computer support by linking graphical maps of arbitrary business processes to software resources used in the support of those processes, presenting a consistent operating interface for all users. A preferred embodiment of PSIM is shown in Figure 1 and is as follows:

- 1. A modelling team creates a set of process models 2 representing the business to be modelled and a tool 4 which generates browser-compatible outputs is used, also noting the software behaviour (e.g. information access and information recording) required to support each process.
- 2. A development team creates a set of browser-compatible resources (e.g. software components or documents) 6 based on the requirements determined in step 1.
- 3. The modelling and/or development team creates a mapping between model elements and software components such as documents or databases in accordance with the invention 8, which stores the mappings and modifies the collection of web pages appropriately.
- 4. The resulting PSIM system 10 is published to the user community 12.
- 5. The above 4 steps are typically periodically repeated in a review cycle in which the process models and resources of the PSIM system 10 are revised and re-published.

An example which illustrates the first four steps of the above preferred embodiment is as follows:

A process model is required to be developed for a healthcare process:

- 1. A team of healthcare experts defines a set of care pathways with a model of patient care 12 using a business modelling tool 14; and the models are published in HTML format using the tool "MooD Web Publisher", which uses the unique identifier of each process as the basis for the process's URL. An example is the model of 'Care Planning and Delivery' as shown in Figure 2.
- 2. A team of software developers develops a set of browser-based software component applications to implement the behaviour required by the processes developed in step one. Figure 4 depicts an example of a 'Find Patient' Form 16 which can be used to list all patients recorded in a particular database matching a certain surname.
- 3. Figure 3 depicts a software tool in accordance with the invention, which represents the web-generated business models in a hierarchy form, and previews the web-pages generated from these as described in step 1. This tool allows the user to map arbitrary files to model elements as depicted in the hierarchy. Figure 5 depicts the dragging of an HTML form developed in step 2 onto a model element in the hierarchy. Figure 6 depicts the user choosing to map this form onto the model element. The tool sets up the mapping in a database, in this case using the database utilised by the business modelling tool, and replaces the appropriate pages in the published set of pages. Figure 7 illustrates how the mapping appears in the modelling tool.
- 4. The system is published in the form of a web-site, with web pages for process models interleaved with active pages providing access to appropriate software behaviour. Figure 8 gives an illustration of the

'Care Planning and Delivery Process' as it appears running in a browser for use by users of the system.

Figure 9 illustrates the result of a user selecting a model element 'Find a Patient' depicted in Figure 8 and typing in some text to the text field. Figure 10 depicts the result of the user selecting the 'Find' button on the form depicted in Figure 9.

Claims:-

1. A method for creating a process-driven information system, said method comprising the following steps:

- creating a process model of a system comprising one or more elements, said model created in a browser-compatible format
- using this model to identify the requirements for software support
- creating one or more software components in a browsercompatible format satisfying the requirements for software support
- generating a process-driven information system comprising said one or more elements of said process model acting as the user interface to said software components
- 2. A method according to claim 1 wherein the process model is part of a set of general purpose graphical business models.
- 3. A method according to claim 2 wherein the process models are accessible via a web browser.
- 4. A method according to claim 1 wherein the one or more elements of the process model are provided in a tool which uniquely identifies each element and maps each element to one or more software components.
- 5. A method according to claim 1 wherein the one or more software components are in the form of arbitrary alternative web pages and/or web-based resources.

- 6. A method according to claim 1 wherein the software components are accessed by the user selection of one or more of the process model elements displayed on a display screen.
- 7. A method according to claim 7 wherein the process model is illustrated on a display screen and the elements can be selected by any conventional PC based user control system.

ABSTRACT

Method for Creating a Process-Driven System

A method for creating a process-driven information system. The method comprises the steps of creating a process model or models comprising one or more elements which are available in a browser-compatible format, creating one or more software components which are accessible in a browser compatible format and generating a process-driven information system comprising one or more elements of the process model which act as the user interface to the one or more software components. This method allows the rapid creation by non-technical users of process models describing the working of an organisation with the models being used as the user interface for directing the operation of a collection of software components.

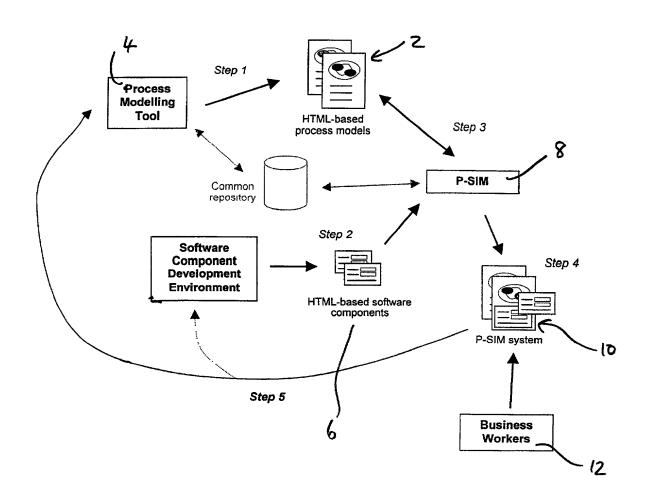


Figure 1. Preferred Embodiment of P-SIM

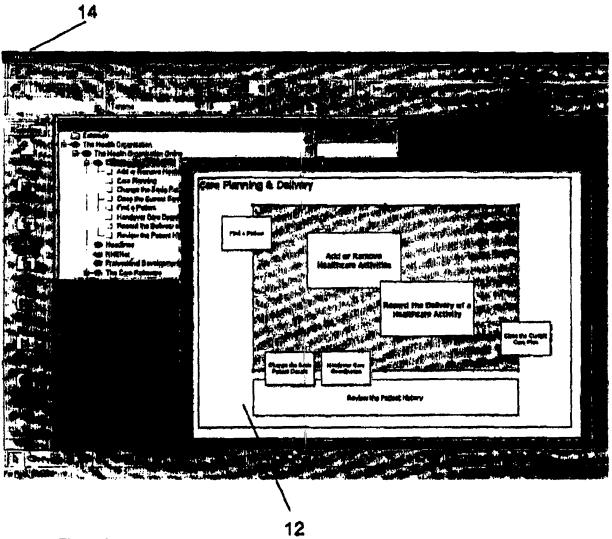


Figure 2.

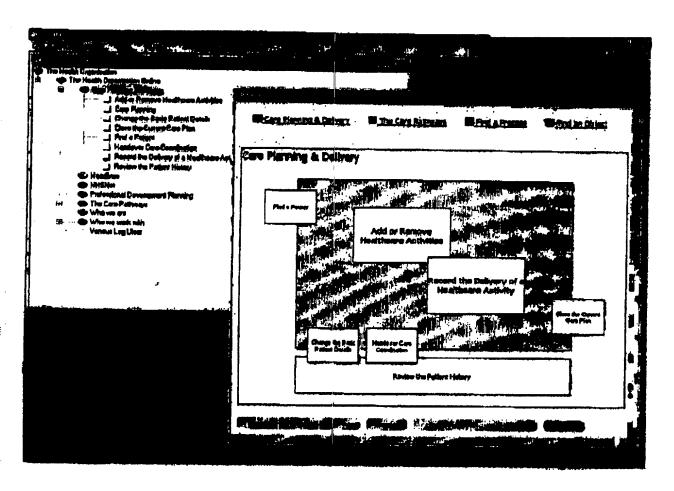


Figure 3.

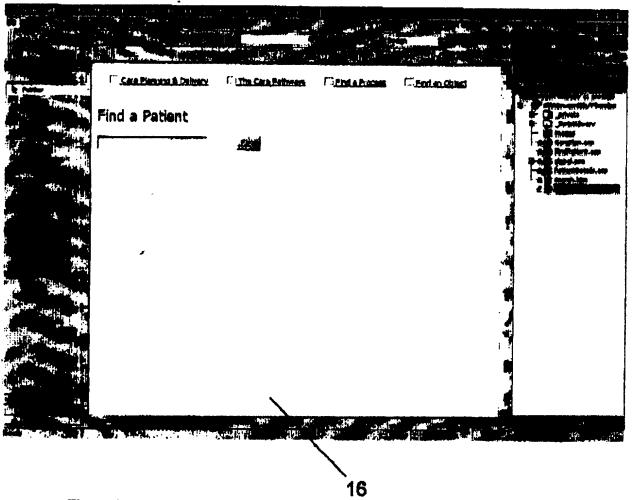


Figure 4.

16/02/00

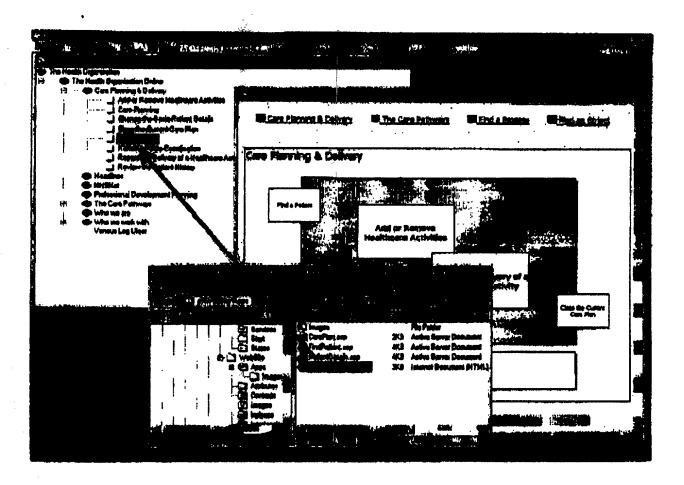


Figure 5.

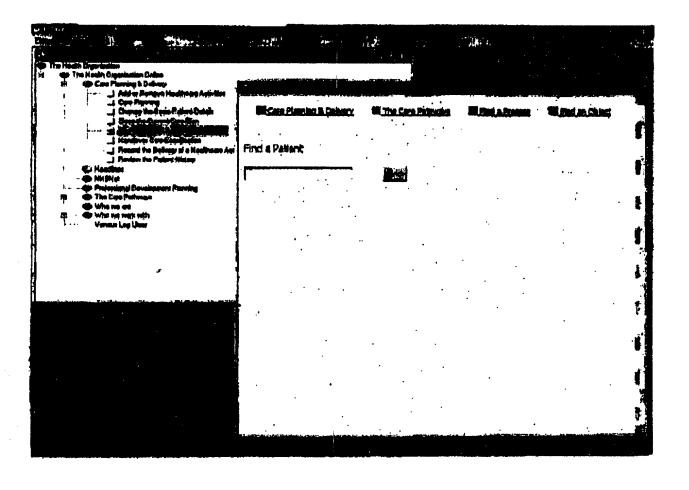


Figure 6.

The second of th

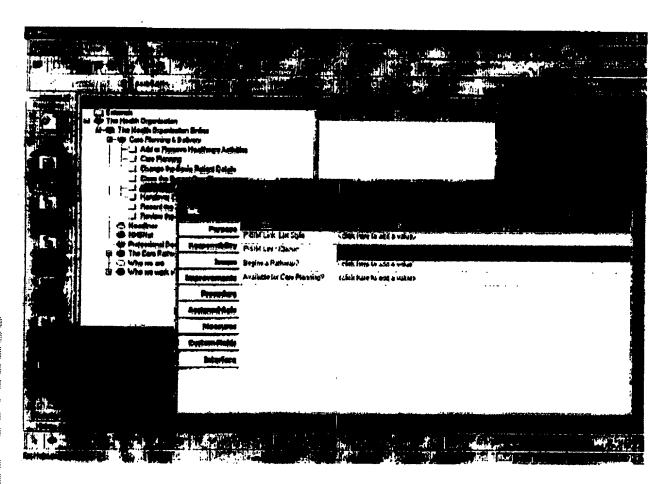
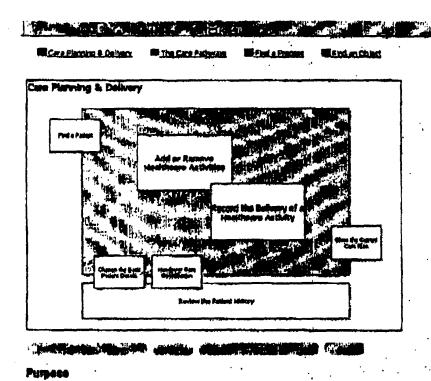


Figure 7.



The left how the line, of

ijij

٠.D

and the later han han

No purpose has been given for this process

Responsibility

No responsibilities have been given for this process

Figure 8.

	ALEK MENTE	17.	
Care Planning & Delivery	The Care Pathways	E ffections	Street an Object
Find a Patient			
Mg Mores of			•
		•	· '

Figure 9.

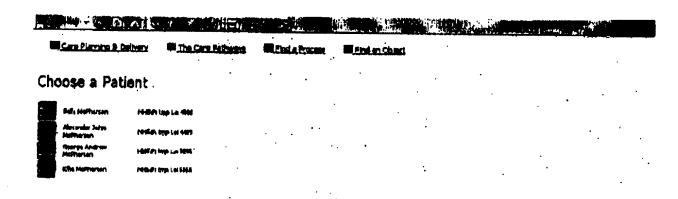


Figure 10.

COMBINED DECLARATION AND POWER OF ATTORNEY

(Original, Design, National Stage Of PCT, Supplemental)

As the below named in This declaration is of the X original design national stage of				
_ supplemental	.,,,,,			
first and sole inventors (ce address and citizenship are as a if only one name is listed below) o atter which is claimed and for whi FOR CONSTRUCTING A PRO	r an original, first and joir ch a patent is sought on t	nt inventor (if pla the invention en	iral names are listed titled:
the specification of whic	ch;			
(a) X is attached here	eto			
(b) was filed on	as		or _ Express	Mail No., as Serial
No. not yet known (c) was described a	and was amended by Prelin and claimed in PCT International; a	Application No		
We hereby state that we claims, as amended by t	e have reviewed and understand the Preliminary Amendment attack	is contents of the above in hed hereto.	dentified specific	eation, including the
We acknowledge the di with Title 37, Code of F	nty to disclose information which i dederal Regulations, Section 1.56	s material to the examinal (a).	tion of this applic	cation in accordance
_ In compliance	with this duty there is attached an	information disclosure	statement 37 CF	R 1.97.
for patent or inventor's of the United States of Al inventor's certificate or a	en priority benefits under Title 35, certificate or of any PCT internation merica listed below and have also performed in the same subject matter having	onal application(s) design so identified below any s) designating at least one	nating at least on foreign applicat country other th	e country other than ion(s) for patent of an the United States
(d) _ no such applica	ations have been filed.			
(e) X such application	ons have been filed as follows:			
COUNTRY	APPLICATION NUMBER	DATE OF FILING		CLAIMED R 37 USC 119
Great Britain	9903830.9	19 February 1999	X_YES _	_NO

As the named inventors, we hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith: Paul H. Johnson, Reg. No. 19,224 and/or Mark G. Kachigian Reg. No. 32,840 and/or Brent A. Capehart Reg. No. 39,620 of the firm of <u>HEAD</u>, JOHNSON &

KACHIGIAN 228 West 17th Place, Tulsa, Oklahoma 74119, Telephone Number (918) 587-2000, members of the Bar of the State of Oklahoma, and Robert R. Keegan, Reg. No. 18,614 and/or Trent C. Keisling, Reg. No. 36,565 of Head, Johnson & Kachigian, 112 West Center Street, Suite 230, Fayetteville, Arkansas 72701, Telephone Number (501) 582-9111, members of the Bar of the State of Arkansas, and Martin G. Ozinga, Reg. No. P-44,992 of the firm Head, Johnson & Kachigian, 204 North Robinson, Suite 3030, City Place Building, 30th Floor, Oklahoma City, Oklahoma 73102, Telephone Number (405) 236-4000, member of the Bar of the State of Oklahoma, to prosecute this application to register, to transact all business in the Patent and Trademark Office in connection therewith, and to receive the Letter Patent Document, if issued.

Address all telephone calls to Mark G. Kachigian at telephone no. (918) 587-2000.

Address all correspondence to Mark G. Kachigian, Head, Johnson & Kachigian, 228 West 17th Piace, Tulsa, Oklahoma 74119.

We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Inventor's signature Residence York, YO10 SDG United Kingdom Citizenship Post Office Address The Innovation Centre, York Science Park, York, YO10 SDG United Kingdom	ited Kingdom
Citizenship British Subject Post Office Address The Innovation Centre, York Science Park, York, YOLO 5DG Uni	ited Kingdom
Post Office Address The Innovation Centre. York Science Park, York, YO10 5DG Un	ited Kingdom
Full name of second inventor Richard Paul Whittington	
Inventor's signature Date Date Date Le Ee & Z OV	<i>U</i>
Residence York, YO10 5DG United Kingdom	
75.47 5 75.3	Ba., i,
Citizenship Post Office Address The Innovation Centre, York Science Park, York, YO 10 500 Un	